Claims

1. A polypeptide-dimer comprising two soluble gp130 molecules, wherein at least one of said soluble gp130 molecules is covalently linked to polyethylene glycol.

2. The polypeptide-dimer of claim 1, wherein each of said soluble gp130 molecules is covalently linked to polyethyleneglycol.

3. The polypeptide-dimer of claim 1 or 2, wherein at least one of said two soluble gp130 molecules comprises the amino acid sequence as depicted in Figure 2 or 3.

4. The polypeptide-dimer of claim 3, wherein both of said two soluble gp130 molecules comprise the amino acid sequence as depicted in Figure 2 or 3.

5. The polypeptide-dimer of any one of claims 1 to 4, wherein the two soluble gp130 molecules are linked to each other through one or more disulfide bridges.

6. The polypeptide-dimer of claims 1 to 4, wherein the two soluble gp130 molecules are linked to each other through a forked polyethylene glycol.

7. The polypeptide-dimer of any one of claims 1 to 4, wherein the two soluble gp130 molecules are linked to each other through a flexible peptide linker.

8. A polynucleotide encoding the polypeptide-dimer of any one of claims 1 to 7 or a monomer of said dimer.

9. An expression vector containing a polynucleotide of claim 8.

10. A host cell containing an expression vector of claim 9.

11. A method of producing the polypeptide-dimer of any one of claims 1 to 7, comprising culturing a host cell of claim 10, recovering the polypeptide-monomer or dimer from said host cell or the culture and PEGylating the monomers or dimers.

12. A pharmaceutical composition containing a polypeptide-dimer of any one of claims 1 to 7.

13. Use of a polypeptide-dimer according to any one of claims 1 to 7 for the preparation of a pharmaceutical composition for the treatment or prevention of bone resorption, hypercalcemia, cachexia, a tumor, an autoimmune disease, an inflammatory disease, a bacterial or viral infection.